Remarks

This Application has been carefully reviewed in light of the Office Action mailed January 28, 2003. All pending Claims 1-4, 6-11, 13-21, 23-28 and 30-43 stand rejected. For the convenience of the Examiner, a copy of all pending claims is provided as Appendix A. Applicant appreciates the Examiner's consideration of the Application. Since Applicant believes all claims are allowable over the prior art without amendment, no amendments have been made. However, Applicant has respectfully provided the following additional remarks. Applicant respectfully requests reconsideration and favorable action in this case.

A. Independent Claims 1, 18, 32, 33 and 43 are Allowable

The Examiner rejects Claims 1-4, 6-9, 18-21, 23-26, 32-38 and 43 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,256,676 to Taylor et al. ("*Taylor*"). Applicant respectfully disagree.

Independent Claim 1 of the present application recites in part:

> a change retrieval engine . . . operable to:
> determine that data in the database managed by the data management system has been changed;
> receive information from the data management system identifying a particular business object with which the changed data is associated;
> access a data model specifying, for each of a plurality of business objects including the particular business object, references to one or more tables managed by the data management system that include data related to the business object;
> identify according to the data model the tables specified for the particular business object to identify data to be retrieved from the database using the data management system according to the received information;
> request from the data management system the data to be retrieved included in the tables identified according to the data model;
> receive the data from the data management system . . . .

Independent Claims 18, 32, 33 and 43 recite substantially similar limitations. *Taylor* does not disclose, teach, or suggest at least these limitations, whether *Taylor* is considered alone or in combination with any other cited reference or with information generally

available to those of ordinary skill in the art at the time the invention was made, for at least the reasons discussed below.

1. ***Taylor* fails to disclose "a change retrieval engine . . . operable to . . . access a data model specifying, for each of a plurality of business objects . . . references to one or more tables managed by the data management system that include data related to the business object . . . ."**

As discussed in Applicant's previous Response dated November 21, 2002, *Taylor* fails to disclose, teach or suggest "a change retrieval engine . . . operable to . . . access a data model specifying, for each of a plurality of business objects . . . references to one or more tables managed by the data management system that include data related to the business object," as recited in Claim 1. In response, the Examiner argues that transformer 738 disclosed in *Taylor* teaches analogous functionality, citing "col. 18, line 56 through col. 19, line 58, and particularly, col. 19, lines 28-40, where *Taylor* teaches an example where the transformer retrieves related data (the transformer retrieves a business object with a state field, 'VA,' and retrieves related data, 'Virginia,' based on the data model, i.e., the transformer definition." (Office Action, ¶ 19)

Applicant respectfully submits that transformer 738 disclosed in *Taylor* clearly does not "teach analogous functionality" to that recited in Claim 1. *Taylor* discloses a system 100 for communicating messages between enterprise applications 710. A transformer 738 is an object of system 100 which implements transformer definitions 716 in order to transform system messages (input messages) from one or more source applications 710 into system messages (output messages) needed by one or more target applications 710. (col. 18, lines 59-62; col. 15, lines 57-60). Thus, output messages contain data from the input messages, transformed as necessary for one or more target applications 710. (col. 19, lines 1-3). Each transformer definition 716 defines the process for transforming a primary input message into one or more output messages. (col. 18, lines 56-59)

The primary input message typically contains most or all of the data needed by the transformer 738 to create the one or more output messages. (col. 18, line 66 to col. 19, line 1).

However, if the primary input message does not contain all the data needed by transformer 738 to create the output messages, supporting input for the transformation process may be obtained using a request/reply message definition 713. (col. 19, lines 28-31). For example, if the primary input message includes abbreviations for state names (such as VA for Virginia), but the target application requires full state names (such as Virginia), the transformer 738 may use a request/reply message definition 713 to "send the abbreviations to an application and receive the state name in return." (col. 19, lines 32-40).

Thus, *Taylor* discloses a transformer 738 operable to use a request/reply message definition 713 to request and receive data from an application that may be used as supporting input for transforming a primary input message into one or more output messages. According to the Examiner, such functions performed by transformer 738 are analogous to "access[ing] a data model specifying, for each of a plurality of business objects ... references to one or more tables managed by the data management system that include data related to the business object," as recited in Claim 1. Thus, the Examiner is apparently alleging that the "application" from which request/reply message definition 713 requests the supporting input information can be equated with the "data model" of Claim 1. However, the Examiner contradicts this apparent allegation later in paragraph 19 in referring to "the data model, i.e., the transformer definition [716]." (Office Action, ¶ 19).

Moreover, the application disclosed in *Taylor* from which supporting input information is requested and received does not "specify[], for each of a plurality of business objects . . . references to one or more tables managed by the data management system that include data related to the business object," as recited in Claim 1. Even assuming for the sake of argument that (1) the information included in the request to *Taylor*'s "application" (for example, the state name abbreviation, VA) could be equated with a "business object" as recited in Claim 1, and (2) *Taylor*'s "application" received the request including the business object (for example, VA) and replied with data related to the business object (for example, Virginia), *Taylor*'s "application" could still only be said to specify, for each of a plurality of business objects, data related to the business object. *Taylor*'s "application" would still fail to specify, for a business object, "references to one or more tables managed by [a] data management system that include data related to the business object," as recited in Claim 1.

Furthermore, even assuming for the sake of argument that *Taylor*'s "application" included one or more tables of data, such as a table associating state name abbreviations with full state names, for example (which Applicant does concede), *Taylor*'s "application" would still fail to include "*references to* one or more tables," much less "references to one or more tables managed by [a] data management system that include data related to the business object," as recited in Claim 1. Nowhere does *Taylor* disclose, teach or suggest that the "application," which may receive and reply to a request for information to be used by a transformer 738, specifies *references to* any tables at all, much less references to tables managed by a data management system.

2. The Examiner appears inconsistent regarding which features of *Taylor* are to be equated with particular features of Claim 1.

The Examiner equates various features of *Taylor* with particular features of Claim 1 at one point in the Office Action, but then equates different features of *Taylor* with the same particular features of Claim 1 as other points in the Office Action. As a result of such inconsistency, Applicant respectfully submits that at least some of the Examiner's arguments are improper.

For example, as discussed above, in paragraph 19 of the Office Action, the Examiner apparently equates *Taylor*'s "application," from which supporting input information may be obtained for transforming a primary input message, with the "data model" recited in Claim 1. However, as discussed above, later in paragraph 19, the Examiner equates *Taylor*'s transformer definition 716 with the "data model" recited in Claim 1. As another example, in paragraph 19 of the Office Action, the Examiner equates a primary input message received by a transformer 738, as disclosed in *Taylor*, with "the business object" recited in Claim 1. ("the transformer retrieves a business object with a state field, 'VA'"). However, in paragraph 21 of the Office Action, the Examiner equates message definitions 713 disclosed in *Taylor* with "the business object" recited in Claim 1. A primary input message and a message definition 713 are distinct features according to *Taylor*. In particular, according to *Taylor*, a message definition 713 identifies data to be extracted from or propagated to an

enterprise application 710, as well as how to construct a system message (such as an input message, for example) from such data. (col. 15, lines 51-56).

3. ***Taylor* fails to disclose a change retrieval engine operable both to "receive information . . . identifying a particular business object with which the changed data is associated" and to "identify according to the data model the tables specified for the particular business object to identify data to be retrieved . . . according to the received information."**

Taylor fails to disclose, teach or suggest a change retrieval engine operable both to "receive information . . . identifying a particular business object with which the changed data is associated" and to "identify according to the data model the tables specified for the particular business object to identify data to be retrieved . . . according to the received information," as recited in Claim 1. Applicant respectfully submits that in the Examiner's response to Applicant's arguments, the Examiner did not appear to address Applicant's arguments regarding the fact that *Taylor* fails to disclose these limitations.

Taylor discloses a source adapter 731 connected to an enterprise application 710. The source adapter 731 may be notified by the enterprise application 710 of an event (such as data on a new customer being entered), extract data relating to the event, and construct a system message based on the message definition object 713 assigned to that source adapter 731. (col. 17, lines 55-58; col. 18, lines 13-22). Thus, *Taylor* arguably discloses receiving new or changed data. However, *Taylor* fails to disclose, teach or suggest "receiv[ing] information . . . identifying a particular business object with which the changed data is associated" and "identif[ing] according to the data model the tables specified for the particular business object to identify data to be retrieved . . . according to the received information," as recited in Claim 1.

The Examiner explicitly equates *Taylor*'s message definitions 713 with the "business objects" recited in Claim 1. (Office Action, ¶ 21). In addition, the Examiner explicitly equates *Taylor*'s message and transformer definition objects 713 and 716 with the "data model" recited in Claim 1. (Office Action, ¶ 21). Assuming for the sake of argument that

such elements could be equated as alleged by the Examiner, the issue would become whether *Taylor* disclosed (1) receiving information that identifies a particular message definition 713 with which the changed data is associated and (2) identifying according to the message and transformer definition objects 713 and 716 the tables specified for the particular message definition 713 to identify data to be retrieved. *Taylor* clearly fails to disclose, teach or suggest such limitations, as discussed below.

For example, *Taylor* fails to disclose, teach or suggest receiving information that identifies a particular message definition 713 with which the changed data is associated. As discussed above, *Taylor* discloses receiving data relating to an event, which may include new or changed data (such as data on a new customer being entered, for example). (col. 18, lines 15-19). However, even assuming for the sake of argument that such received data may be equated with the "changed data" of Claim 1 (which Applicant does not concede), nowhere does *Taylor* disclose, teach or suggest receiving information that identifies a message definition 713 with which the changed data is associated. Rather, *Taylor* merely teaches using a message definition 713 to construct a system message from the received changed data.

As another example, *Taylor* fails to disclose, teach or suggest identifying, according to the message and transformer definition objects 713 and 716, the tables specified for the particular message definition 713 to identify data to be retrieved. First, neither message definition objects 713 nor transformer definition objects 716 disclosed by *Taylor* specify tables for particular message definitions 713. Applicant does not understand how message definition objects 713 could specify tables for particular message definitions 713, and Applicant further submits that transformer definition objects 716 also do not specify any tables for particular message definitions 713. Indeed, nowhere does *Taylor* disclose that transformer definition objects 716 specify any tables at all. Moreover, even if *Taylor*'s message and transformer definition objects 713 and 716 did specify tables for particular message definitions 713, *Taylor* would still fail to disclose, teach or suggest identifying, according to such message and transformer definition objects 713 and 716, the tables specified for a particular message definition 713 to identify data to be retrieved. For at least these reasons, *Taylor* fails to disclose, teach or suggest "receiv[ing] information . . .

identifying a particular business object with which the changed data is associated" and "identif[ing] according to the data model the tables specified for the particular business object to identify data to be retrieved . . . according to the received information," as recited in Claim 1.

For at least the reasons given above, Claim 1 is allowable over *Taylor*. Independent Claims 18, 32, 33 and 43 are also allowable over *Taylor* for analogous reasons. Thus, Applicant respectfully requests reconsideration and allowance of independent Claims 1, 18, 32, 33 and 43, together with all claims that depend from Claims 1, 18 and 33.

B. Dependent Claims 2-4, 6-9, 19-21, 23-26, and 34-38 are Allowable

In addition to being dependent on Claims 1, 18 and 33, which Applicant has shown to be allowable, Claims 2-4, 6-9, 19-21, 23-26, and 34-38, which each depend from one of Claims 1, 18 and 33, contain further patentable distinctions over the prior art of record.

For example, Claim 8 recites "the change retrieval engine is further operable to receive one or more key values from the data management system, each key value identifying an instance of the particular business object for which data was changed." Claims 25 and 37 recite substantially similar limitations. *Taylor* does not disclose, teach, or suggest these limitations, whether *Taylor* is considered alone or in combination with any other cited reference. In response to the arguments set forth in Applicant's previous Response dated November 21, 2002, the Examiner argues that *Taylor* does disclose the use of such key values at column 15, lines 50-55. The Examiner explains that "[s]ince the message definition object identifies data that the system is to propagate to an enterprise application, and furthermore, the reference teaches that the messaging system is event driven, and is used to migrate data from disparate systems to a central data warehouse or repository (see col. 11, lines 29-40)." (Office Action, ¶ 22)

Applicant respectfully submits that the portions of *Taylor* identified by the Examiner do not disclose the limitations of Claim 8. First, column 15, lines 50-55 in *Taylor* fails to disclose, teach or suggest anything regarding key values identifying an instance of a business object, much less key values identifying an instance of a business object for which data was

changed, or receiving such key values from a data management system. In particular, message definition objects 713 disclosed in *Taylor* cannot be equated with the "key values" recited in Claim 1. *Taylor*'s message definition objects 713 do not "identify[] an instance of the particular business object for which data was changed," as recited in Claim 8. In addition, message definition objects 713 are not received from a data management system, even assuming for the sake of argument that an enterprise applications 710 of *Taylor* could be equated with the "data management system" recited in Claim 1. Rather, *Taylor* discloses that message definition objects 713 are assigned to source adapters 731, which are connected to enterprise applications 710. (col. 16, lines 41-42; col. 17, lines 55-56). Moreover, earlier in the Office Action, the Examiner equates message definition objects 713 with the "business object" of Applicant's claims. Thus, the Examiner is apparently equating message definition objects 713 with both the "key values" and the "business object" of Claim 8, which is clearly improper as Claim 8 recites "each key value identifying an instance of the particular business object for which data was changed."

Second, Applicant respectfully submits that the Examiner's assertion that *Taylor*'s message definition objects 713 identify data that the system is to propagate to an enterprise application, and that the messaging system disclosed by *Taylor* is event driven and used to migrate data from disparate systems to a central data warehouse or repository (citing col. 11, lines 29-40), does not appear to be directed to the limitations of Claim 8 discussed above. (see Office Action, ¶ 22). As discussed above, *Taylor*'s message definition objects 713 simply cannot be equated with the "key values" recited in Claim 1. Moreover, the fact that *Taylor* teaches an event-driven messaging system in which data migrates to a central data warehouse or repository fails to explain how *Taylor* discloses anything about "receiv[ing] key values from a data management system," much less "each key value identifying an instance of the particular business object for which data was changed," as recited in Claim 8.

Thus, for at least these reasons, *Taylor* fails to disclose, teach, or suggest "the change retrieval engine is further operable to receive one or more key values from the data management system, each key value identifying an instance of the particular business object for which data was changed," as recited in Claim 8.

Claims 9, 26 and 38 are allowable for at least the reasons discussed above regarding Claims 8, 25 and 37. Claim 9 recites that "the change retrieval engine is further operable to request data from the tables that are associated with one or more instances of the particular business object, the instances of the particular business object identified by one or more key values received from the data management system." Claims 26 and 38 recite substantially similar limitations. As discussed above, *Taylor* does not disclose teach or suggest anything regarding key values identifying instances of a business object, much less key values identifying instances of a business object for which data was changed, or such key values received from a data management system. Thus, for at least this reason, *Taylor* fails to disclose, teach, or suggest all of the limitations of Claims 9, 26 and 38.

Applicant requests reconsideration and allowance of dependent Claims 2-4, 6-9, 19-21, 23-26, and 34-38.

C. Dependent Claims 10, 11, 27, 28, 39 and 40 are Allowable

The Examiner rejects Claims 10, 11, 27, 28, 39 and 40 under 35 U.S.C. § 103(a) as being unpatentable over *Taylor* and further in view of U.S. Patent No. 6,212,529 to Boothby et al. Claims 10, 11, 27, 28, 39 and 40 are allowable at least because they depend from independent Claims 1, 18 and 33, respectively, which have been shown above to be allowable. Applicant respectfully requests reconsideration and allowance of Claims 17, 31 and 42. If the Examiner maintains the rejection of Claims 10, 11, 27, 28, 39 and 40, Applicant reserves the right to provide more detailed remarks concerning the allowability of Claims 10, 11, 27, 28, 39 and 40.

D. Dependent Claims 13-16, 30 and 41 are Allowable

The Examiner rejects Claims 13-16, 30 and 41 under 35 U.S.C. § 103(a) as being unpatentable over *Taylor* and further in view of U.S. Patent No. 6,381,609 to Breitbart et al. Claims 13-16, 30 and 41 are allowable at least because each depends from one of independent Claims 1, 18 and 33 which have been shown above to be allowable. Applicant respectfully requests reconsideration and allowance of Claims 13-16, 30 and 41. If the

Examiner maintains the rejection of Claims 13-16, 30 and 41, Applicant reserves the right to provide more detailed remarks concerning the allowability of Claims 13-16, 30 and 41.

E. Dependent Claims 17, 31 and 42 are Allowable

The Examiner rejects Claims 17, 31 and 42 under 35 U.S.C. § 103(a) as being unpatentable over *Taylor* and further in view of U.S. Patent No. 6,308,178 to Chang et al. ("*Chang*"). Claims 17, 31 and 42 are allowable at least because they depend from independent Claims 1, 18 and 33, respectively, which have been shown above to be allowable. Applicant respectfully requests reconsideration and allowance of Claims 17, 31 and 42. If the Examiner maintains the rejection of Claims 17, 31 and 42, Applicant reserves the right to provide more detailed remarks concerning the allowability of Claims 17, 31 and 42.

Conclusion

Applicant respectfully submits that the present Application is in condition for allowance and favorable notice thereof is requested.

If the Examiner believes a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Christopher W. Kennerly, Attorney for Applicant, at the Examiner's convenience at (214) 953-6812.

Although no fees are believed due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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